

STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: December 23, 2015

Permit Number:

970732P

Date Expires: December 01, 2017

Issued To:

Bristol Metals, LLC

Installation Address:

390 Bristol Metals Road

Bristol

Installation Description:

Three (3) Acid Pickling Tanks for
Stainless Steel Surface Treatment

Emission Source Reference No.

82-0032-02

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated August 21, 2015, and signed by Kyle Pennington, President for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants. TAPCR 1200-03-09-.03(8)

(conditions continued on next page)


TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. In addition to water, the pickling solution within each tank shall only contain nitric acid and hydrofluoric acid. The maximum concentration of nitric acid within the pickling solution shall be ten percent (10%) by weight. The maximum concentration of hydrofluoric acid within the pickling solution shall be four percent (4%) by weight.
TAPCR 1200-03-09-.01(1)(d)

3. The maximum capacity of pickling solution for each tank shall not exceed:

<u>Tank ID</u>	<u>Gallons</u>
368	10,000
265	10,000
baby	3,400

Exceeding the above listed maximum capacity for any tank or the addition of one or more tanks to this source will require a construction permit. TAPCR 1200-03-09-.01(1)(d)

4. The owner or operator of this facility shall conduct an emissions performance test on all emission points of either Tank 368 or Tank 265 for both nitrogen oxides and hydrofluoric acid within two-hundred and seventy (270) days of the issuance of this permit.

Each performance test shall consist of three separate runs using the applicable test method. Each run of the performance test shall monitor nitrogen oxide and hydrofluoric acid emissions throughout the entirety of at least one batch pickling treatment.

One test run shall be performed while pickling a batch of steel at maximum or reasonably near maximum mass limitations as prescribed by operating limitations. One test run shall be performed while pickling a batch of steel at minimum or reasonably near minimum mass limitations as prescribed by existing operating records. The respective maximum concentration of each acid within the pickling solution as allowed by Condition 2 shall be reasonably maintained. Emissions capture by the tested exhaust system(s) must be ensured to the satisfaction of the Technical Secretary.

The owner or operator shall monitor the parameters of the emission units during the performance test for compliance assurance. The parameters shall include the following items:

1. All materials usage data as required by Log #1 as per Condition 8
2. Relevant exhaust system(s) operating parameters including, but not limited to:
 - a) Description and diagram(s) of exhaust system that readily proves total emissions capture
 - b) Volumetric outflow rate and direction of exhaust emission to atmosphere
 - c) Geometry of exhaust ducting at cross-section of emission
 - d) Distance from central point at the cross-section of exhaust emission duct to ground directly below
 - e) Moisture content and temperature of exhaust
3. Treatment time for each batch
4. Compositional and physical data for the steel alloy(s) treated
5. Geometrical data of the treated pipes
6. Vacancy time between batches
7. Temperature and pH of pickling bath throughout test

TAPCR 1200-03-10-.01

5. At least sixty (60) days prior to conducting the source emissions testing, the permittee must submit a test protocol to the Technical Secretary for approval. The test protocol must include a description of the testing methodologies proposed to be utilized, a listing of the process and control equipment parameters proposed to be monitored during the testing period, a testing schedule, a proposed method to ensure emissions capture by the tested exhaust system(s), data quality objectives, and both an internal and external quality assurance program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data. The notification and site-specific test plan shall be submitted to the Division at the address listed below or by electronic pdf copy via e-mail.

Compliance Validation Program
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243

or Adobe Portable Document Format (PDF) Copy to:
Air.Pollution.Control@tn.gov

In the event the permittee is unable to conduct the performance test on the date specified in the notification requirement in this condition due to unforeseeable circumstances beyond their control, the permittee must notify the Technical Secretary as soon as practical without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the permittee of legal responsibility for compliance with any other applicable provisions of any other applicable Federal, State, or local requirement, nor will it prevent the Technical Secretary from implementing or enforcing this permit. TAPCR 1200-03-10-.01

6. The source owner or operator shall provide sampling ports, a safe and suitable platform for the conducting of source emissions testing on the effluent gas stream(s) of the source, utilities for sampling and testing equipment, and means necessary to ensure emissions capture by the examined exhaust system(s). TAPCR 1200-03-10-.01
7. Within 60 days after conducting the performance test, the owner or operator shall furnish the Technical Secretary a written report of the results of the emissions performance test. TAPCR 1200-03-10-.01
8. A log of material usage for the tested tank shall be compiled, in the following tabular format or an alternative format which readily provides the same required information. All data, including all required calculations, must be entered in the log within seven (7) days of the emissions performance test and submitted to the Division no later than sixty (60) days following the emissions performance test. This log must be retained for a period of not less than two (2) years.

Log #1: Emissions Performance Test Materials Log for Tank #: _____ of Source 82-0032-02*

Initial Volume of Total Pickling Solution (Gallons):					
Initial Concentration of Hydrogen Fluoride (% by weight):					
Initial Concentration of Nitric Acid (% by weight):					
Date	Spent Solution Removed (Gallons)	Nitric Acid Added (Gallons)	Hydrogen Fluoride Added (Gallons)	Water Added (Gallons)	Steel Alloy ID** and Mass Treated (tons)
mm/dd/yyyy					

*The initial volume of total pickling solution, initial concentration of hydrogen fluoride, and initial concentration of nitric acid data must be entered into the log, indicating conditions before the start of the emissions performance test. The total volume of pickling solution removed from the tank, the total volume of nitric acid, hydrogen fluoride, and water added to the tank, and total mass of steel treated should be recorded at the conclusion of the test. The table should be expanded to accommodate each separate steel alloy treated.

**Each emissions performance test materials log should be accompanied with an attached material data sheet that provides reasonably precise compositional data for each steel alloy treated.

TAPCR 1200-03-09-.01(1)(d)

9. The performance test shall be conducted and data reduced in accordance with methods and procedures specified in 40 CFR part 60 appendix A. TAPCR 1200-03-10-.01
10. The performance tests shall be conducted under such conditions as the Technical Secretary shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Technical Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit unless otherwise specified in the applicable standard. TAPCR 1200-03-10-.01
11. Nitrogen oxides (NO_x) emitted from this source shall not exceed a mass rate to be determined after the completion of the prescribed emissions performance test. TAPCR 1200-03-07-.07(2)
12. Fluorides emitted from this source shall not exceed a mass rate to be determined after the completion of the prescribed emissions performance test. TAPCR 1200-03-07-.07(2)
13. Visible emissions from this source shall not exceed twenty (20) percent opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)
14. This permit is valid only at this location. TAPCR 1200-03-09-.03(6)
15. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application. TAPCR 1200-03-09-.01(1)(d)
16. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09-.03(8)
17. This permit shall serve as a temporary operating permit from the date of issuance to the receipt of a standard operating permit, provided that an application for an operating permit is submitted to the Division at least sixty (60) days after the emissions performance test. The application shall be submitted to the Division at the address listed below or by electronic pdf copy via e-mail.

Tennessee Division of Air Pollution Control
 William R. Snodgrass Tennessee Tower, 15th Floor
 312 Rosa L. Parks Avenue
 Nashville, TN 37243

Adobe Portable Document Format (PDF) Copy to:
Air.Pollution.Control@tn.gov

TAPCR 1200-03-09-.02(3)

(end of conditions)

The permit application gives the location of this source as 36°32'31.8" Latitude and -82°11'11.4" Longitude.